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DOI:

[10.1080/0987630601037992](https://doi.org/10.1080/0987630601037992)

*Document Version*

Early version, also known as pre-print

[Link to publication record in King's Research Portal](#)

*Citation for published version (APA):*

Cathcart, S., Patton, R., Hickman, M., Hendry, C., & Ashworth, M. (2007). Comparing population estimates for drug users, the prevalence of blood-borne viruses and the provision of services in one London borough: Evidence of a gap in provision? *Drugs: Education, Prevention and Policy*, 14(3), 205 - 215.  
<https://doi.org/10.1080/0987630601037992>

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Comparing population estimates for drug users, the prevalence  
of blood borne viruses and the provision of services in one  
London borough: evidence of a gap in provision?

**Authors:**

Simon Cathcart,  
Specialist Registrar in Public Health,  
Lambeth Primary Care Trust,  
1 Lower Marsh,  
London SE1 7NT

Robert Patton,  
National Addiction Centre,  
Institute of Psychiatry,  
King's College London,  
De Crespigny Road,  
London SE5 8AF

Matthew Hickman,  
Senior Lecturer in Public Health,  
Department of Social Medicine,  
University of Bristol,  
Whiteladies Road,  
Bristol BS8 2PR

Chiara Hendry,  
Drug & Alcohol Health Care Team Leader,  
Lambeth PCT,  
Masters House,  
Dugard Way,  
London SE11 4TH

Mark Ashworth,  
Honorary Senior Lecturer,  
Department of General Practice and Primary Care,  
King's College London,  
5 Lambeth Walk,  
London SE11 6SP.

**Correspondence:**

Mark Ashworth (as above)

**Title: Comparing population estimates for drug users, the prevalence of blood borne viruses and the provision of services in one London borough: evidence of a gap in provision?**

**Abstract:**

*Aims*

To estimate the size of the drug using population in Lambeth, an inner city London borough, and the prevalence of blood borne virus (BBV) infections in the drug using population. To identify possible shortfalls in service provision for drug users.

*Methods*

Direct and indirect estimates of the drug using population size using national and local data sources. Prevalence estimates for BBV infections were derived from local survey data. Routine data and a survey of borough services for drug users were compiled.

*Findings*

Based on indirect methods we estimate there were 3117 drug users in Lambeth in 2001/2 (20 per 1000 15-44 year olds), of whom 1641 were injecting users (11 per 1000); 1353 were reported as being in drug treatment programmes. BBV prevalence rates: hepatitis B, 37%; hepatitis C, 71%; HIV, 6%. Estimated demand for needle exchange services, in terms of one syringe per injection, and methadone maintenance may be up to double local provision.

*Conclusions*

More accurate and feasible methods are needed for the routine estimation of the population of drug users. Accurate information is needed for service planning.

(Word Count: 181)

**Title: Comparing population estimates for drug users, the prevalence of blood borne viruses and the provision of services in one London borough. A gap in provision?**

**Introduction**

Recent British government health policy has emphasised the importance of developing a series of minimum standards and long term strategies for the provision of disease specific services. This process began with the publication in 1999 of the National Service Framework for Mental Health (Department of Health, 1999) and now covers a range of chronic diseases. A similar process has covered the management of patients with drug misuse problems.

In 2003, the National Treatment Agency for Substance Misuse, a government body, published a document describing a national framework for commissioning services for drug users. Termed, 'Models of Care for the Treatment of Drug Misusers' (National Treatment Agency, 2003), this document offers a detailed description of the panoply of services required to address the health problems associated with drug misuse. One chapter is devoted to the issue of blood borne viral (BBV) infections.

Hepatitis B, hepatitis C and HIV infection are the most common blood borne viral infections frequently associated with injecting drug use. Injecting drug users may be protected from all three infections by avoiding blood or semen contact with infected individuals. Transmission of infection may be prevented by ensuring that those who are infected do not share needles, syringes and other injecting paraphernalia, and that they practice safe sex. Vaccination is available to protect against hepatitis B and

primary care vaccination programmes for drug users have been recommended (Royal College of General Practitioners, 2005).

Prevalence rates for blood borne viral infections vary considerably across the country, as does service provision for their prevention and management. Hickman and colleagues (2004) noted high rates of hepatitis C infection among drug users and calculated that syringe and needle distribution was adequate for less than one third of all injections. Conversely, harm reduction interventions in the UK, including syringe exchange provision, have contributed towards maintaining a low prevalence of HIV (Stimson, 1995).

We therefore aimed to quantify the current size of the drug using population in Lambeth, an inner city highly deprived London borough with previously reported high rates of drug use (Hickman *et al*, 1999). Secondly, we aimed to determine the prevalence of blood borne viral infections in this population. Thirdly, we aimed to describe service provision for these drug users. Finally, by comparing substance user population estimates and blood borne virus prevalence values with service provision, we aimed to quantify the shortfall in services required to meet the needs of these drug users.

## **Methods**

The following data sources were utilised to provide prevalence estimates:

- National Drug Treatment Misuse Service (NDTMS) (National Drug Treatment Monitoring Service, 2002) publishes data on the numbers of drug users registered with treatment programmes;

- The Office of National Statistics (ONS) publishes data on drug related deaths (Office of National Statistics, 2000);
- Unlinked Anonymous Prevalence Monitoring Programmes (UAPMP) which monitors HIV, hepatitis B and C prevalence rates in six national cohorts including injecting drug users (IDUs) (Health Protection Agency, 2004);
- The Health Protection Agency co-ordinates a survey of HIV infection diagnosed (SOPHID) that began in 1995. The survey covers England, Wales and Northern Ireland and is the only source of national data on patients with HIV infection who are accessing HIV related care (Health Protection Agency, 2003);
- British Crime Survey (BCS) which interviews over 50,000 people each year about crime and crime-related issues (Aust et al, 2002);
- Community recruited survey data was used to obtain indirect estimates of drug user prevalence (Hickman et al, 2004);
- Other local survey data (see below, under ‘Mapping local services’).

Most data relate to 15-44 year olds, the peak decades for drug use.

#### *Indirect prevalence estimates*

Direct prevalence estimates of illicit drug misuse based on population surveys may be unreliable because of reporting bias due to the illegal nature and ‘underground’ culture associated with it. Indirect methods estimate the unobserved part of the drug using population in a variety of ways, based on an analysis of the observed part (Hickman et al, 1999, 2003). We used both multiplier and capture-recapture techniques in this study to allow cross validation of the prevalence estimates

(Hartnoll, 1997). An average number and population rate of users was calculated from the individual estimates.

Multiplier methods take data on numbers of users in contact with a known data source (the benchmark) and derive an estimate of the total population using the proportion of users known to the data source (the multiplier) (Frischer, 2004; Hartnoll et al, 1985). For example by applying an observed multiplier (1% = annual mortality rate among injecting drug users, Davoli et al, 1997) to the number of drug-related deaths in Lambeth (29 = benchmark: ONS), the total number of drug users is estimated as  $29 \times 100/1 = 2900$ . The multiplier in this example, although derived from a different population, is robust enough to use in other settings (Frischer, 2001; Hartnoll, 1997).

This method was also undertaken using the following pairs of data: a) proportion of drug users in treatment (national multiplier: Godfrey et al, 2002) and the number in treatment locally (benchmark: NDTMS); b) the proportion of users who access needle exchange (local multiplier: Hickman et al, 2004) and the number of clients using this service (benchmark: local data – see below); and c) the HIV infection rate among injecting drug users (local multiplier: UAPMP) and the number of known HIV positive injectors (benchmark: SOPHID).

Capture-recapture methods (CRM) have been promoted for use with difficult to reach populations (Hickman et al, 1999). Their use in epidemiological studies for estimating under-ascertainment or adjusting population surveys and estimates has been described in detail by others (Domingo-Salvany, 1997; Hook and Regal, 1995).

To identify and match drug users in at least two data sources, a number of identifiers (initials, date of birth and sex) are used. The data sources are combined into a single dataset (in SPSS) which is used to create three way (contingency) tables showing the number of cases in one or more data sources. The tables are then analysed in STATA using Poisson regression (log linear methods) to model potential dependencies between datasets (Hook and Regal, 1995) and find the simplest model with the best fit (Hickman et al, 2004). For example, CRM assumes that each person is no more likely to be in one dataset than another (independence), but in reality an individual may be more (positive dependence) or less likely (negative dependence) to appear in one or more lists. Dependencies between epidemiological and health data sources are inevitable but using this approach to analysis allows for adjustment for the effects of these dependencies (Hook and Regal, 1995).

#### *Mapping local services*

A summary of all services available to drug users in the borough was compiled. Services provided by community drug teams, primary care and secondary care drug services were mapped. Data gathering involved semi-structured interviews with service providers in Lambeth and reviewing local publications in the grey literature (Patton, 2004; Figueroa-Munoz, 2000; The Stockwell Project, 2001; Taylor, 2003).

## **Results**

#### *Drug user prevalence estimates*

Data from the national datasets and from local information using direct and indirect prevalence estimates are summarised in Tables 1 and 2. Estimates of drug user



prevalence derived from these multiple data sources and which apply to our study setting, are displayed in the final column of both tables.

#### *Blood borne virus prevalence estimates in drug users*

The prevalence of hepatitis B, hepatitis C and HIV infections in drug users, both nationally and in our local study setting, is summarised in Table 3.

### **Service provision**

#### *Needle exchange programme*

Injecting drug users (IDUs) attend any one of six needle exchange sites in Lambeth. In total, this service distributes around 660,000 needles per year to 1000 known clients. However, we have estimated that the true population of IDUs is 1641 (Table 2).

Based on the assumption that users inject a median frequency of 2.5 times a day (Judd et al, 2005) for 300 days per year, the number of needles required to prevent any sharing or re-use in this population is 1.2 million. To meet this need would require an approximate doubling of current service provision. However, users are often reluctant to collect large quantities of needles and syringes due to the risk of arrest; and an increase in 'drug litter' may raise community concerns if distribution is increased.

#### *Methadone maintenance programme*

The total capacity for methadone maintenance treatment in Lambeth was found to be sufficient for 1000 patients. Almost 600 patients were part of a methadone maintenance programme in primary care and a further 400 patient treatment slots

were identified in secondary care. Our estimate for numbers of opiate users (1461) suggests a 50% shortfall in current service provision.

## **Discussion**

### *Main findings*

The mean estimate for the prevalence of injecting drug use in Lambeth in 2001/02, using indirect methods, was 11 per 1000 young adults. This is a similar, albeit slightly lower estimate, than those of other local studies (13 per 1000: Hickman *et al*, 1999, 17 per 1000 Hickman *et al*, 2004). Comparable figures for opiate (9.7 per 1000) and crack use (8.8 per 1000) are lower than for injecting drug use. This is unlikely to be the case as most injectors will use opiates but not all opiate users are injectors.

Understandably there are greater problems with the accuracy of recording data on illegal drug users (which depends upon voluntary completion of registration forms) than there are for needle exchange derived data (which merely requires a count of needles dispensed).

The multiplier method may under- or over-estimate local prevalence depending on the multiplier used and the accuracy of the benchmark. One of our estimates for injecting users (617) was derived from an HIV dataset and is in fact lower than the number of known injectors (1000). Limitations of the HIV multiplier method include assumptions that all HIV-infected injectors are recorded, and that these individuals are still injecting (Frischer, 2001). Inclusion of this value has reduced our overall estimate for injecting users which was derived from three sources. The true number of injecting users is therefore likely to be higher than our calculated mean estimate.

The direct estimates also appear to significantly underestimate the prevalence of opiate and crack use (table 1). This underestimate is likely to be attributable to under-reporting among the small number of injecting and other drug users who are included in the British Crime Survey. The high value for all Class A drug use stems from the data gathering process which results in inclusion of all drug users including those with no medical problems, as well as recreational users.

The prevalence of blood borne viral infections in IDUs is considerably higher in Lambeth than nationally (table 3). HIV rates are thirty times higher than the national figure, and rates may now be approaching 1.6% (Health Protection Agency, 2006). The prevalence of hepatitis C infection is as high as 80% among the Portuguese injecting community of Lambeth (Sad, 2003). With more virus circulating among users, high risk injecting practices such as needle sharing will inevitably lead to an increase in transmission, infection and ultimately healthcare costs.

In terms of service shortfall, we found the estimated opiate use in Lambeth to be around 50% greater than the capacity for methadone maintenance treatment. Injecting drug users probably require double the numbers of needles that local services are currently providing. Sharing of needles and syringes remains high, for example among the Portuguese community in Lambeth 100% of injecting users had shared needles in the last month (Health Protection Agency, 2003). To what extent this risky behaviour can be reduced by effective service provision is not known, and should be further explored.

Whether this hypothesised shortfall in service provision translates into increased risk of blood borne virus infection arising from needle sharing is uncertain. It is possible that, faced with an inadequate needle supply, the injecting user may resort to needle re-use rather than needle sharing. Re-use without needle sharing may give rise to other concerns such as septicaemia from dirty needles but cross-infection would be minimised. Some commercially available products are now available that support re-use, for example coloured syringe plungers to allow users to identify their own 'works'.

Although this study only considered BBV infections, the local context gives rise to wider concern about the infection risks in an IDU community where needle sharing is a relatively common practice. In 2002, there was an outbreak of group A streptococcal septicaemia among IDUs in Lambeth. The source of infection may have been related to contamination of drugs carried in the mouth or between the buttocks (a practice known as 'plugging') (Cowan, 2004). Bacterial transmission via shared needles has also been reported (Kolokithas & Rao, 1997).

#### *Implications of findings for other geographical areas*

Drug user population estimates are essential for forecasting the needs of current users and planning appropriate service provision. The methods used in this study, particularly the capture-recapture and multiplier methods, have been employed elsewhere, both for local and national (including Home Office) estimates of drug use (Hartnoll, 1985; Hickman, 1999, Frischer, 2001). However, for a small area study such as this we would expect variation in the different estimates, and as such we have used cross validation and comparison with other studies to corroborate our findings.

Our final estimates are credible which suggests the methods are transferable at a primary care trust level.

Inevitably, the local setting for a population survey is, to some extent, unique. Lambeth's population is young, has a high proportion of ethnic minority residents ('White British' comprise 49.6% of the population; Afro-Caribbeans, the largest ethnic minority group in Lambeth, represent 25.8% of the local population; the Portuguese are the largest group of new arrivals) and social deprivation is high (the 21<sup>st</sup> most deprived local authority in England) (Annual Public Health Report, Lambeth PCT, 2004). Several local public health concerns overlap with the issues raised by our survey of drug users and BBV prevalence. For example, Lambeth has the largest proportion of HIV positive residents of any borough in England (7% of the population in 2002) and high levels of all sexually transmitted infections (Annual Public Health Report, Lambeth PCT, 2004). Lambeth is clearly not a 'typical' English borough. Nevertheless, many of the methodological issues of our survey apply to other areas. The methodology of population sampling and generating population estimates does not depend on the population being representative for England as a whole and can readily be applied to other areas, even if the final estimate generated by this approach was unique to Lambeth. Similarly, the complexity of obtaining accurate population estimates and the need for multiple data sources applies regardless of setting.

Not only are the social characteristics of Lambeth very different to those of England as a whole, but drug users themselves differ from the local population. The NDTMS data source used in our survey (National Drug Treatment Monitoring Service, 2002)

also provided demographic information about all users attending drug services in Lambeth. Based on this information, the local ratio of male to female drug users reflects that in the rest of the country at around three to one, and most users are above 25 years old. The NDTMS data source also reported that in 2001/02, 73% of users were 'white', 15% were 'black' (here, this term includes mixed black, black British, black Caribbean, black African and black other) and data were missing for 5%. The majority of white users seen at most services may either be a true reflection of the drug using population or have arisen because of differential use of services by ethnic groups or the result of inconsistent collection of ethnicity data.

The proportion of Portuguese residents in Lambeth is high (upper estimates of 10%), and among these are many young IDUs (Figuerola-Munoz, 2000). At one north Lambeth needle exchange 25% of registered clients were Portuguese (Stockwell Project, unpublished data). Other 'ethnic groups' identified among drug users include Italian and Somali, while among sex-working women Albanian, Czech and Thai nationalities are common (Taylor, 2003).

A review of the national literature (Fountain *et al*, 2003) concluded that clients from different ethnic backgrounds may be deterred from attending drug user services because of cultural inappropriateness, language barriers, location and opening times. Drug using women may also be deterred from accessing 'establishment' services due to fears around childcare issues (White *et al*, 2001).

Taken together, these examples of certain groups who access services less readily, suggest that our estimates of drug user prevalence are likely to be underestimates and any shortfall in provision of services is likely to be correspondingly larger.

### *Recommendations*

The difficulties of accurate estimation of prevalence are hardly surprising, arising as they do from a combination of the illegal nature of drug use, the client's wish for anonymity and problems with the provision of data by drug services. However, the general difficulties in obtaining information are compounded by the lack of local information on which to base service planning. To overcome this, a common tool for the assessment of physical health could be devised and community drug teams asked to collaborate with reporting drug related health problems and behaviours to specialist commissioners. For this reason, a health needs assessment form is now used in Lambeth which ascertains current physical health, BBV status (current condition, willingness to be tested, immunisation status), risk behaviours and data on substance use (type, quantity, frequency and route of administration). Other areas might wish to develop their own simple assessment forms designed to provide the exact information needed for service planning.

### *Conclusion*

The population estimates suggest a possible shortfall between service provision and the needs of drug users, particularly injecting drug users. Coupled with high rates of BBVs in Lambeth, this shortfall may contribute to increasing local rates of hepatitis and HIV infections among drug users (Health Protection Agency, 2006). We support the expansion of needle exchange services, along with adequate methadone

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maintenance therapy and hepatitis vaccination, to help control this growing problem. However, any proposal for increased service provision must be based on accurate estimates of the population of drug users and our survey has demonstrated how difficult it is to obtain such information, even using multiple data sources, sophisticated techniques such as multiplier and capture-recapture methods, and combined direct and indirect prevalence estimates.

DRAFT



## References

- Aust R, Sharp C, Goulden C. (2002) *Prevalence of drug use: key findings from the 2001/2002 British Crime Survey*. London, Home Office.
- Cowan R. (2004) *Dealers using young children to deliver heroin after police crack down*. The Guardian, Oct 23<sup>rd</sup>, 4.
- Drug and Alcohol Health Care Team. (2005) *Annual Activity Report for the Borough of Lambeth, April 2004 to March 2005*. Three Boroughs Health Care Team, Lambeth Primary Care Trust.
- Davoli M, Perucci C, Rapiti E, Bargagli A, D'Ippoliti D, Forastiere F, Abeni D. (1997) A persistent rise in mortality among injection drug users in Rome, 1980 through 1992. *American Journal of Public Health*, 87, pp.851-853.
- Department of Health (1999). *The mental health national service framework*. London: DoH.  
[http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT\\_ID=4009598&chk=jmAMlk](http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4009598&chk=jmAMlk)
- Domingo-Salvany A. (1997) *Estimating the prevalence of drug use using the capture-recapture method: an overview*. In: *Estimating the prevalence of problem drug use in Europe*. EMCDDA Scientific Monograph Series, Luxembourg.
- Figuerola-Munoz J. (2000). *Assessment of the health needs of the Portuguese speaking community living in North Lambeth Primary Care Group (NLPCG) area in Lambeth*. London: Lambeth, Southwark and Lewisham Health Authority (LSLHA).
- Fountain J, Bashford J, Winters M, Patel K. (2003) *Black and minority ethnic communities in England: a review of the literature on drug use and related service provision*. London, National Treatment Agency for Substance Misuse.
- Frischer M, Hickman M, Kraus L, Mariani F, Wiessing L. (2001) A comparison of different methods for estimating the prevalence of problematic drug misuse in Great Britain. *Addiction*; 96, pp 1465-1476.
- Frischer M. *Estimating the prevalence of drug abuse using the mortality multiplier method: an overview*. (2004). In: *Estimating the prevalence of problem drug use in Europe*. EMCDDA Scientific Monograph Series, Luxembourg.
- Godfrey C, Eaton G, McDougall C, Culyer A. (2002) *The economic and social costs of Class A drug use in England and Wales, 2000*. Home Office Research Study 249. London: Home Office Research, Development and Statistics Directorate.
- Hartnoll R, Lewis R, Mitcheson M, Bryer S. (1985). Estimating the prevalence of opioid dependence. *Lancet*, 338, pp. 203-205.
- Hartnoll R. (1997) Cross-validating at local level. Estimating the prevalence of problem drug use in Europe. Luxembourg: EMCDDA Scientific Monograph Series, Luxembourg.

- Health Protection Agency. (2003). *Survey of Prevalent HIV Infections Diagnosed (SOPHID)*. London, HIV/STI Division, CDSC, Health Protection Agency.  
[http://www.hpa.org.uk/infections/topics\\_az/hiv\\_and\\_sti/publications/hiv\\_sophid\\_2003.pdf](http://www.hpa.org.uk/infections/topics_az/hiv_and_sti/publications/hiv_sophid_2003.pdf)
- Health Protection Agency. (2004). *The Unlinked Anonymous Prevalence Monitoring Programme (UAPMP)*. London, Department of Health.  
[http://www.hpa.org.uk/infections/topics\\_az/hiv\\_and\\_sti/hiv/epidemiology/ua.htm](http://www.hpa.org.uk/infections/topics_az/hiv_and_sti/hiv/epidemiology/ua.htm)
- Health Protection Agency (2006). *Evidence of a continuing increase in the HIV prevalence among injecting drug users in England and Wales*. Communicable Disease Report Weekly, 16, pp. 2-3.  
<http://www.hpa.org.uk/cdr/archives/2006/cdr1106.pdf>
- Hickman M, Cox S, Harvey J, Howes S, Farrell M, Frischer M, Stimson G, Taylor C. (1999) Estimating the prevalence of problem drug use in inner London: a discussion of three capture-recapture studies. *Addiction*, 94, pp.1653-1662.
- Hickman M, Taylor C, Chatterjee A, Degenhardt L, Frischer M, Hay G, Tilling K. (2003) *Estimating drug prevalence: Review of methods with special reference to developing countries*. UN Bulletin on Narcotics, LIV (1 & 2), pp. 15-32.
- Hickman M, Higgins V, Hope V, Bellis M, Tilling K, Walker A, Henry J. (2004) Injecting drug use in Brighton, Liverpool, and London: best estimates of prevalence and coverage of public health indicators. *Journal of Epidemiology and Community Health*, 58, pp. 766–771.
- Hook EB, Regal RR. (1995) Capture-recapture methods in epidemiology: methods and limitations. *Epidemiologic Reviews*, 17, pp. 243-264.
- Judd A, Hickman M, Jones S, McDonald T, Parry J, Stimson G. (2005). Incidence of hepatitis C virus and HIV among new injecting drug users in London: prospective cohort study. *British Medical Journal*, 330, pp. 24-25.
- Kolokithas D, Rao G. (1997). Septicaemia due to *Streptococcus pyogenes* in an intravenous drug abusing couple. *Journal of Hospital Infection*, 35(3), pp. 248-250.
- Lambeth PCT (2004). *Annual Public Health Report, 2003-2004. Health inequalities in Lambeth – needs and priorities*.  
[http://www.lambethpct.nhs.uk/document\\_view.php?DID=000000000000000000379](http://www.lambethpct.nhs.uk/document_view.php?DID=000000000000000000379)
- National Drug Treatment Monitoring Service. (2002). *Statistics from the Regional Drug Misuse Databases on drug misusers in treatment in England, 2001/02*. London, Department of Health.
- National Treatment Agency. (2003). *Models of care for the treatment of drug users*. London, Department of Health.  
[http://www.nta.nhs.uk/publications/mocpart2/mocpart2\\_feb03.pdf](http://www.nta.nhs.uk/publications/mocpart2/mocpart2_feb03.pdf)
- Office of National Statistics. (2000) *Deaths related to drug poisoning: results for England and Wales, 1997 – 2001*. Health Statistics Quarterly, pp. 65 – 71

[http://www.statistics.gov.uk/downloads/theme\\_health/HSQ17.pdf](http://www.statistics.gov.uk/downloads/theme_health/HSQ17.pdf)

Patton R. (2004), *Identification and management of physical health problems among an injecting drug using population*. London: Lambeth, Southwark and Lewisham PCTs, National Addiction Centre.

Royal College of General Practitioners. (2005). *Guidance for hepatitis A & B vaccination of drug users in primary care and criteria for audit*. 1<sup>st</sup> Edition, London, Royal College of General Practitioners.

Sad G. (2003). *An introduction to the physical health needs of drug users identified by drug users attending a combined needle exchange / vaccination clinic*. Lambeth, Southwark and Lewisham Health Authority.

Stevens A, Raftery J, Mant J, Simpson S, eds. (2004) 'Characteristics of health care needs assessments' in *Health care needs assessment [on line version]*. Birmingham: Department of Public Health and Epidemiology.  
<http://hcna.radcliffe-oxford.com/introframe.htm>

Stimson GV. (1995). AIDS and injecting drug use in the United Kingdom, 1987 – 93. The policy response and the prevention of the epidemic. *Social Science and Medicine*, 41, pp. 699-716.

Stimson GV, Oppenheimer E. (1982) *Heroin addiction: treatment and control in Britain*. London, Tavistock.

The Stockwell Project. (2001). *Stockwell Project Mortality Audit*. London, South London and Maudsley NHS Trust.

Taylor D. (2003). *Sex for sale: new challenges and new dangers for working women on and off the streets*. London, Mainliners.

White C, Best D, Farrell S, Witton J. (2001) *Service provision for substance misusing women who are pregnant or parenting: a needs analysis in north Lambeth*. London, National Addiction Centre, South London and Maudsley NHS Trust.

Wilkinson P. (1998). *Needs assessment for alcohol and drug users in LSL*. Lambeth, Southwark and Lewisham Health Authority: Joint Community Care Plan for Inner South East London.

Weipert GD, Bewley TH, d'Orban PT. (1978). Outcomes for 575 British opiate addicts entering treatment between 1968 and 1975. *UN Bulletin Narcotics*, 30, pp. 21–32.

**Table 1: Direct drug user prevalence estimates for Lambeth, 2001/02.**

Indicator	Data source	Overall population estimate <sup>a</sup>	Rate per 1000 <sup>b</sup>
All drug use (in treatment)	NDTMS	1353	9
Class A drug use <sup>c</sup>	BCS	7245	39
Opiate use	BCS	327	1.8
Crack use	BCS	400	2.2

<sup>a</sup> Estimate based on Lambeth population 15 – 44 years of 150,594 (2001 Census)

<sup>b</sup> NDTMS figures for 15 – 44 year olds in Lambeth notified as in treatment; BCS figures for 15 – 59 year olds

<sup>c</sup> Heroin, morphine, cocaine, ecstasy, LSD

**Table 2: Indirect drug user prevalence estimates for Lambeth, 2001/02.**

Indicator	Data source	Multiplier (%)	Benchmark	Estimated number of users	Mean population estimate	Mean rate per 1000 <sup>a</sup>
	NDTMS	33	1353	4063		
All drug use	Deaths (ONS)	1	29	2900	3117	21.0
	CRM <sup>b</sup>	n/a	n/a	2400		
	Exchange <sup>c</sup>	41	1000	2439		
Injecting drug use	HIV <sup>d</sup>	6	37	617	1641	11.0
	CRM <sup>b</sup>	n/a	n/a	1868		
	NDTMS	42	463	1057		
Opiate use	CRM <sup>b</sup>	n/a	n/a	1861	1461	9.7
	NDTMS	42	297	707		
Crack use	CRM <sup>b</sup>	n/a	n/a	1927	1318	8.8
<sup>a</sup> Estimate based on Lambeth population, 15 – 44 years, of 150,594 (2001 Census)						
<sup>b</sup> Capture recapture method						
<sup>c</sup> Needle and syringe exchange (Lambeth), (Hickman et al, 2004)						
<sup>d</sup> SOPHID and UAPMP						

**Table 3: Proportion of drug users infected with blood borne viruses**

Area	Hepatitis B (%)	Hepatitis C (%)	HIV (%)
Lambeth	37	71	6.0
England and Wales	30	38	0.2

Source: UAPMP (2003)